



PROGRESS REPORT NO. 171

TO: Robert Tan, U.S. Environmental Protection Agency (EPA) – via Electronic mail
Kathryn Cerise, EPA – via Electronic mail

FROM: Kris McCaig, Teck American Incorporated (TAI)

Cc: Denise Mills, TAI – via Electronic mail
Rob Orr, TAI – via Electronic mail

DATE: October 7, 2020

FILE NO: 01-773180-000

RE: Upper Columbia River (UCR) Remedial Investigation/Feasibility Study
(RI/FS) - Progress Report No. 171 Month Ending September 2020

Pursuant to Paragraph 39 of the June 2, 2006 Settlement Agreement (Agreement), the following is intended to provide a summary of activities completed during the past month in compliance with the aforementioned Agreement. It is also intended to provide a brief summary of pending and on-going activities.

Soil Amendment Technology Evaluation Study (SATES):

TAI continued coordination with the SATES team and Robert Tan, Remedial Project Manager for the Region 10 Superfund & Emergency Management Division, during the month.

The Ohio State University (OSU) laboratory continued performing analyses on the Phase II bench-scale testing time point 3 soil samples collected on March 11, 2020. This work was delayed because of restrictions on the number of personnel working in the laboratory as part of OSU's COVID-19 response. OSU is on track to provide the results to TAI in late October 2020. TAI submitted the final work plan for Phase III (field implementation) and Phase IV (monitoring) and responses to comments on the draft work plan to EPA on September 18, 2020. TAI plans to initiate the field study in late October 2020, and will coordinate the work with EPA, representatives of the Confederated Tribes of the Colville Reservation, and other members of the SATES technical team to meet this schedule.

Baseline Ecological Risk Assessment (BERA):

Weight of evidence (WOE) – As previously agreed to by TAI and EPA, a third and final collaborative call on the BERA WOE process was held on September 3, 2020. TAI received an email from EPA on September 11, 2020 with a recommendation for an example dataset to run through the WOE process as agreed on the September 3 call. TAI initiated the effort to prepare the WOE example for discussion with EPA on November 10, 2020, and will distribute pre-read materials prior to the call.

Soil Toxicity Reference Values (TRVs) – TAI continued work on development of soil TRVs, following receipt of EPA's approval of the upland soil background assessment on July 15, 2020. TAI's work focused on implementation of Steps 1 through 6, as described in the "Final Approach for Evaluating the Potential for Metals Toxicity to Plants and Invertebrates in the Baseline Ecological Risk Assessment (May 2019)." TAI provided a draft technical memorandum to EPA on September 18, 2020, which presented results of Steps 1 through 6.

Phase 3 Sediment Study Sediment Facies Mapping – TAI received a letter from EPA on September 8, 2020 with approval to finalize the Phase 3 Sediment Study - Sediment Facies Mapping (SFM) Data Summary Report (DSR) for the Upper Reach Operable Unit. The final SFM DSR was delivered to EPA, on September 25, 2020 and copies were mailed to the RI/FS distribution.

2019 Phase 3 Sediment Study:

Benthic Macroinvertebrate (BMI) Data Analysis – EPA provided a BMI Discussion Summary Memo to TAI on September 8, 2020 that summarized the details of the collaborative engagement between TAI and EPA related to the analytical approach for the 2019 Phase 3 Sediment Study benthic macroinvertebrate community data. The memo also outlined EPA's expectations for the approach to be used by TAI. TAI provided a memo to EPA on September 16, 2020 stating agreement with EPA's BMI discussion summary and indicating that TAI has a clear understanding and the needed information to conduct the BMI community data analyses and present the results in the BERA.

Backscatter Electron Microscopy (BSEM) – TAI received comments from EPA on September 16, 2020 resulting from EPA's review of the draft final BSEM data report TAI delivered to EPA on August 12, 2020.

Toxicity Identification Evaluation (TIE) Pilot Study – TAI continued to provide weekly progress reports on the additional testing to EPA through September 11, 2020, and provided summaries of test results when available. TAI received analytical results from the additional experiments that were completed in August, consistent with the July 17, 2020 final study plan. As of this writing TAI is preparing a summary of these results for discussion with EPA on October 8, 2020, and will distribute the summary for review prior to the call.

Bioassay Testing – EPA provided comments to TAI on data validation files and reports for the UCR 2019 Phase 3 Sediment Study with bioassay-related sediment chemistry that were posted for EPA quality assurance review in August; one set of comments on September 8, 2020, and another on September 23, 2020. TAI provided responses to EPA's comments on September 8, 2020 and September 24, 2020, respectively.

Human Health Risk Assessment – TAI provided geospatial coordinates for the Northport and Columbia Gardens air quality monitoring stations to EPA via email on September 14, 2020, in partial response to EPA's request for information sent via email on August 26, 2020. As of this writing, TAI is compiling additional information for submittal to EPA in October.

Should you have any questions or require any additional information, please do not hesitate to contact me at 509-623-4501.